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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,016	02/17/2004	Wolfgang Bloching	071308.0511	9587
31625	7590	07/12/2005	EXAMINER	
BAKER BOTTS L.L.P. PATENT DEPARTMENT 98 SAN JACINTO BLVD., SUITE 1500 AUSTIN, TX 78701-4039			BUDD, MARK OSBORNE	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,016

Applicant(s)

BLOCHING ET AL. 

Examiner

Mark Budd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 10 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-15-05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claims 1-5, 7, 8 and 13 are rejected under 35 USC 102(b) as being anticipated by Kapel.

Note Kapel figure 1 (see also col. 4, lines 5-col. 5, line 7) which teaches a piezoelectric stack #8 disposed in a tube spring #9, a top plate #11 and a bottom plate #10 where in the top plate is fixed directly to an injector housing #1 via caulked areas #20. Note that weld #20 extends down the side and over the top of #11 and in filling the gap between #11 can be viewed as having both a radial and tangential relationship to #11. It is unclear whether a groove or chamfer was provided prior to welding, but since such structure loses its identity after welding, such pre structures could not patentably distinguish from this prior art.

Claims 6, 11, 12 and 14 are rejected under 35 USC 103(a) as being unpatentable over Kapel.

Kapel teaches the claimed structure except for the particular materials and the physical configuration of four welded areas. Regarding the later, although not explicitly taught it appears that weld probably #20 would extend along the entire circular gap between 31 and #11. Or, it shows at least two areas as fig. 1 is a cross-sectional view. The only requirement would be that the joint is sufficiently strong for the job. Thus optimization of or use of less material (save cost) would have been within the skill expected of the routineer and therefore would have been obvious to one of ordinary skill in the art. Likewise, it has long been held that selection from among known suitable materials is within the skill expected of the routineer. Thus selection from among known suitable metal materials for the caulking (welding) would have been obvious to one of

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ordinary skill in the art based e.g. on cost, temperature considerations and ease of manufacture.

Regarding applicants arguments, it is noted that a weld fairly constitutes a "caulk" when giving "caulk" its broadest reasonable interpretation. That is to fill or close, make air on water tight, to seal a joint or seam by filling with some material" (Random House New College Dictionary, 1980). Thus, the rejections based on Kappel are seen as proper.

Claims 9, 10 and 15-17 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Budd/ds

07/08/05

MARK O. BUDD
PRIMARY EXAMINER
ART UNIT 2834